



FEMA

Fact Sheet

Catastrophic Earthquake Planning

NEW MADRID SEISMIC ZONE

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is working with the eight states of the New Madrid Seismic Zone (NMSZ) in the central United States on a catastrophic earthquake response plan that involves partnerships and collaboration with hundreds of government agencies; business, industry and voluntary organizations; and scientific and academic institutions. The states include Alabama, Arkansas, Illinois, Indiana, Kentucky, Missouri, Mississippi and Tennessee.

The initial phase of the endeavor involved scenario-driven planning workshops in the NMSZ states and local level tabletop exercises. Workshop participants included operational and planning personnel from all levels of government and the private and academic sector. State and local participants include emergency service coordinators, emergency management staff, county emergency managers, state and local law enforcement, fire and emergency medical personnel, public works and public health. The initiative is one of the most comprehensive and complex catastrophic disaster planning endeavors undertaken. FEMA deployed emergency planners to the eight states and the four FEMA Regions and is supporting the participation of the Central U.S. Earthquake Consortium, the Mid-America Earthquake Center, Sandia National Laboratories and George Washington University's Institute for Crisis, Disaster and Risk Management.

A catastrophic earthquake event in the NMSZ, which runs from west of Memphis, Tenn., into southern Illinois, would impact a much larger area than would a similar earthquake in California. That's because the

NMSZ is the largest area in the world that is susceptible to soil liquefaction and because the earth's crust in the Central and Eastern U.S. transmits earthquake ground shaking farther and more efficiently than the West Coast, according to the U.S. Geological Survey (USGS). Cost estimates for building loss alone exceed \$70 billion dollars.

The work involves FEMA Headquarters, four FEMA Regions, the U.S. Geological Survey, the U.S. Department of Health and Human Services, the U.S. Army Corps of Engineers, U.S. Northern Command, the American Red Cross and more than 200 local governments. While the states establish their own planning objectives, the overall goal is to establish a unified response approach that integrates emergency management, private sector and critical infrastructure communities into a single, coordinated response with federal, state, local, tribal and other government entities.

The largest earthquakes in history in the continental United States occurred along the New Madrid zone in the winter of 1811–1812. Moderate earthquakes have occurred several times in the past century in Central U.S., including a 5.2 quake on April 18, 2008, in the Wabash Valley seismic zone in southwestern Illinois, just north east of the New Madrid area.

The New Madrid planning initiative is part of a large catastrophic planning effort under way at FEMA that includes working with states to develop plans for managing mass evacuations and sheltering, conducting risk analyses and planning for hurricane response and recovery.

FEMA leads and supports the nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation, to reduce the loss of life and property and protect the nation from all hazards including natural disasters, acts of terrorism, and other man-made disasters.

